

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) A method for collecting multimedia program information from a plurality of transport streams received at a transcoder/multiplexer, the method comprising:

receiving a plurality of transport streams, each of which contains program information regarding multimedia programs carried in the transport stream,

receiving a request for collecting program information, said request identifying program information to be collected from one or more of the transport streams and said request including a first list of requested program information and a second list of requested program information, wherein the first list of program information includes at least one Program Identification (PID) Code and the second list of program information includes one of Table ID, Table ID Extension, Version Number or Section Number,

obtaining program information packets from the plurality of transport streams as they are received, the obtained program information packets containing first received program information and second received program information;

matching the first received program information with the first list of requested program information; and

if the first received program information matches information in the first list of requested program information, matching the second received program information with the second list of requested program information.

wherein the first received program information includes a port and a Program Identification (PID) Code and the second received program information includes one of Table ID, Table ID Extension, Version Number or Section Number, and the method comprises:

storing the port and the PID in an active list associated with the port, the active list including requests for collecting program information for transport streams received on the port;

moving the request to a processing list if the first received program information matches the PID in the active list for the port, wherein the processing list includes multiple requests that have matched PIDs but do not have matches with second lists of requested program information for the requests;

moving the request to a completed list if the one of the Table ID, the Table ID Extension, the Version Number or the Section Number in the second list of requested program information matches the second received program information; and

notifying an application making the request that a complete match is found.

2. (Original) The method of claim 1 wherein at least one of the transport streams is an IVIPEG transport stream.
3. (Original) The method of claim 1 wherein the requested program information is comprised of multiple fields.
4. (Original) The method of claim 3 wherein said fields include at least one Program Identification (PID) Code.

5. (Previously Presented) The method of claim 1 wherein the steps of matching the first received program information and matching the second received program information is done asynchronously with respect to said receiving step.
6. (Previously Presented) The method of claim 1 further comprising the step of notifying an application requesting the program information once a match is located for the first received program information and the second received program information.
7. (Original) The method of claim 6 wherein the application requesting the program information periodically queries the status of the request.
8. (Original) The method of claim 1 wherein the program information carried in the transport streams is received out of the sequence specified in the request.
9. (Original) The method of claim 1 wherein said processing includes dividing the requested information into multiple lists and searching each list as program information is received from the transport streams.
10. (Original) The method of claim 9 wherein a linear search algorithm is used to conduct the search.
11. (Original) The method of claim 9 wherein a binary search algorithm is used to conduct the search.

12. (Canceled)

13. (Original) The method of claim 1 wherein plurality of requests is received simultaneously from different applications.

14. (Currently amended) Apparatus for collecting multimedia program information from a plurality of transport streams, comprising:

an input module for receiving a plurality of transport streams, each of which contains at least one of video, audio, and program information regarding multimedia programs carried in the transport stream,

an input processor for separating program information packets from the plurality of transport streams as they are received, the separated program information packets containing first received program information and second received program information and

a central processing unit for: (i) receiving a request for specific program information separated by said input processor, and the request includes a first list of requested program information and a second list of requested program information, wherein the first list of program information includes at least one Program Identification (PID) Code and the second list of program information includes one of Table ID, Table ID Extension, Version Number or Section Number (ii) matching the first received program information with the first list of requested program information; and (iii) if the first received program information matches information in the first list of requested program information, matching second received program information with the second list of requested program information.

wherein the first received program information includes a port and a Program Identification (PID) Code and the second received program information includes one of Table ID, Table ID Extension, Version Number or Section Number, and the central processing unit

stores the port and the PID in an active list associated with the port, the active list including requests for collecting program information for transport streams received on the port;

moves the request to a processing list if the first received program information matches the PID in the active list for the port, wherein the processing list includes multiple requests that have matched PIDs but do not have matches with second lists of requested program information for the requests;

moves the request to a completed list if the one of the Table ID, the Table ID Extension, the Version Number or the Section Number in the second list of requested program information matches the second received program information; and

notifies an application making the request that a complete match is found.

15. (Original) Apparatus in accordance with claim 14 wherein at least one of the transport streams is an IVIPEG transport stream.

16. (Original) Apparatus in accordance with claim 14 wherein the requested program information is comprised of multiple fields.

17. (Original) Apparatus in accordance with claim 16 wherein, said fields include at least one Program Identification (PD) Code.

18. (Previously presented) Apparatus in accordance with claim 14 wherein matching the first received program information and matching the second received program information is done asynchronously with respect to receiving requests for collecting program information.
19. (Previously presented) Apparatus, in accordance with claim 14 further capable of notifying an application requesting the program information once a match is located for the first received program information and the second received program information.
20. (Original) Apparatus in accordance with claim 19 wherein the application requesting the program information periodically queries the status of the request.
21. (Original) Apparatus in accordance with claim 14 wherein the program information carried in the transport streams is received out of the sequence specified in the request.
22. (Original) Apparatus in accordance with claim 14 wherein said processing includes dividing the requested information into multiple lists and searching each list as program information is received from the transport streams.
23. (Original) Apparatus in accordance with claim 22 wherein a linear search algorithm is used to conduct the search.
24. (Original) Apparatus in accordance with claim 22 wherein a binary search

algorithm is used to conduct the search.

25. (Canceled)

26. (Original) Apparatus in accordance with claim 14 wherein a plurality of requests is received simultaneously from different applications.

27. Canceled.

28. Canceled.